Remarks

This paper is being provided in Response to the August 18, 2005 Final Office Action for the above-referenced application. In that Office Action, Claims 7-10 were objected to, and Claims 1-6 and 11-14 were rejected. Applicant thanks Examiner for indicating that claims 7-10 are allowable.

Furthermore, Applicant thanks both Examiner Nguyen and Supervisor Toately for granting Applicant telephone interview, respectively. Supervisor Toatley has stated that the reference cited by Examiner Nguyen does not appear to be prior art to the present invention nor does not appear to disclose, teach or suggest all of the elements disclosed by the present invention. Supervisor Toatley informed Applicant that the Supervisor will recommend to Examiner Nguyen that the cited reference and the pending rejections be withdrawn. The following remarks further confirm that the cited reference does not disclose, teach or suggest all of the elements of the present invention. Applicant therefore respectfully requests that Examiner Nguyen remove all grounds for rejection of the present application, thereby placing it in condition for allowance.

Rejections under 35 U.S.C. § 102(e)

The rejection of Claims 1-6 and 11-14 under 35 U.S.C. § 102(e) as being anticipated by Hansen et al. (U.S. Patent No. 6,400,453) is hereby traversed and reconsideration thereof is respectfully requested. Applicant respectfully submits that Claims 1-6 and 11-14 are patentable over Hansen for the reasons set forth in detail below.

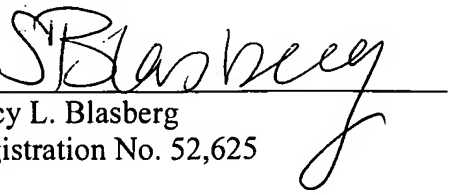
The present invention is an instrumentation system for the rapid analysis and sorting of multicellular organisms using optical characteristics such as light scatter and fluorescence to classify each organism in a flowing stream. The instrument system reports the *intensity and the position* of the fluorescence along the major (long) axis of the organisms. The present inventive system combines strains of multicellular organisms characterized by a stable special pattern of fluorescence, staining, or other optically detectable characteristics, with an instrument that can accurately sort multicellular organisms *based on the position* of an experimental feature relative to other invariant features by axial scanning. Specifically, independent Claims 1 and 11 recite a population of multicellular organisms with a plurality of spatially distinct, optically detectable, phenotypic characteristics and an instrument for detecting the *location* of the spatially distinct, optically detectable, phenotypic characteristics on the organism and for orienting the organism along its longitudinal axis.

Hansen discloses an instrument for analyzing and dispensing objects larger than about 70μm in diameter by detecting the *presence* of a characteristic. Hansen does not disclose, teach or suggest an instrument system for detecting the *location* of the spatially distinct, optically detectable, phenotypic characteristics on the organism. Therefore, Applicants respectfully submit that the presently claimed invention is not anticipated by Hansen, and request that this rejection be withdrawn.

Based on the above, Applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections and objections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the Examiner is invited to contact the undersigned at 617-248-4054.

Please charge any necessary fees or credit any overpayments to our Deposit Account No. 03-1721.

Respectfully submitted,



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Dated: November 10, 2005

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